

Lab Report : 5

Problem no.- 1: Write a java program that perform basic arithmetic operations. The program should define multiple version of a method name "calculate" . Each method performing different arithmetic operation, specially implement the following - →calculate(int a, int b) this method return addition on a and b. →calculate(double a, double b) this method return multiply. →calculate(int a, int b, char c) this method should perform on operation based on the user choice (+, -, *, /, %).

Code :

```
import java.util.Scanner;
class Arithmetic{

    int a,b;
    double x,y;
    char c;

    public int calculate(int a, int b){

        return a+b;
    }
    public double calculate(double x, double y){

        return x*y;
    }
    public double calculate(int a, int b, char c){

        if(c=='+') {
            return a+b;
        }
        else if(c=='-') {
            return a-b;
        }
    }
}
```

```

    }
    else if(c=='*') {
        return a*b;
    }
    else if(c=='/') {
        return a/b;
    }
    return 1;
}
}

```

```

public class Report5 {
    public static void main(String[] args) {
        Scanner inp = new Scanner(System.in);
        System.out.print("Enter two int value: ");
        int a=inp.nextInt();
        int b=inp.nextInt();

        System.out.print("Enter two double value: ");
        double x=inp.nextDouble();
        double y=inp.nextDouble();

        System.out.print("Enter the char: ");
        char c = inp.next().charAt(0);

        Arithmetic obj= new Arithmetic();
        System.out.println("Addition of int value: "+ obj.calculate(a,b));
        System.out.println("Multiplication of double value: "+ obj.calculate(x,y));
        System.out.println("The result based on the char '"+c+"' is: "+
obj.calculate(a,b,c));

    }
}

```

Output :

```
Problems Javadoc Declaration Console X
<terminated> Report5 [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (Mar 8, 2024, 8:32:26 PM – 8:32:58 PM) [pid: 11444]
Enter two int value: 11 5
Enter two double value: 7.1 5.3
Enter the char: -
Addition of int value: 16
Multiplication of double value: 37.629999999999995
The result based on the char '-' is: 6.0
```